Death Valley Ranch Main House Death Valley National Monument Inyo County California HABS No. CA-2257 A

HABS CAL, 14-DVWM, 1-A-

PHOTOGRAPHS

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Historic American Buildings Survey
National Park Service
Department of the Interior
Washington, D.C. 20013-7127

HISTORIC AMERICAN BUILDINGS SURVEY

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DEATH VALLEY RANCH MAIN HOUSE/ANNEX (Scotty's Castle)

HABS No. CA-2257 A

Location:

National Park Service Route 5 (commonly known as the North Highway), 25 miles west of the junction of US Route 95 with Nevada State Route 267 (commonly known as Scotty's

Junction), Death Valley National Monument, Inyo County,

California.

Present Owner:

National Park Service, Department of the Interior.

Present Use:

The Main House/Annex is open to the public all year round. Ranger-guided tours are led everyday of the year and are available to the public for a fee.

Significance:

Once fully designed and remodeled, the Main House/Annex became the largest and most beautifully appointed building of the Death Valley Ranch complex. It served as the home and residence for the Johnsons whenever they visited the area.

Part I. Historical Information

Note: For general information on the Death Valley Ranch complex, see HABS No. CA-2257.

- A. Physical History.
 - 1. Date of Erection:
 - c. 1922 Construction of the original Main House structure began.
 - c.1924 Construction of the original Main House structure was completed.

By Early 1926 - Construction of the "Commissary" was completed.

June 1926 - Remodeling of the Main House began.

- 2. Architect: Albert Mussey Johnson probably designed the original Main House and Commissary structures. Charles Alexander MacNeilledge designed the extensive remodeling and additions.
- Original and Subsequent Owners:

Albert Mussey Johnson (c.1922-1948) Gospel Foundation (1948-1970) National Park Service (1970-Present) 4. Builders, contractors, suppliers:

General Superintendent - F. W. Kropf (c.1922-1924)
M. Roy Thompson (1925-1931)

Building Superintendent - F. X. A. Kreil (c.1925-1927)

H. B. Brown (1927-1930)C. G. Johnson (1930-1931)

W. D. McLean (1931)

Suppliers - Many firms were patronized by owner, architect, and builder during the course of construction. The majority of suppliers were California businesses.

Several companies provided the large amount of handmade clay tiles and decorative elements used in the Main House and Annex. These include Gladding-McBean Company of Los Angeles, which supplied "Palacio" style tiles for the patios and "Junipero" style tiles for the roofs. Most of the other exterior tiles and clay decorations were made by Alhambra Kilns (California), including threshhold pieces, chimney pots and arches, flower pots, and glazed frogs. majority of the decorative and plain tiles used in the interior of the Main House and Annex were made by the Spanish Pottery of Los Angeles. These include baseboards, floors and floor borders, window hoods and surrounds, friezes, door surrounds, stair risers, fireplace surrounds, and solarium fountain. The Spanish Pottery also made the tile portions of the sun dial. Tile for the bathrooms was purchased from Hispano-Moresque Tile Company of Los Angeles.1

The vast majority of the decorative and functional handwrought iron hardware in the Main House and Annex was made by the Earle Hardware Manufacturing Company of Los Angeles. Examples of that firm's work include the sea horse latch handle and sea gull, ocean wave, and dolphin strap hinges of the sea horse room, the bookshelf hinges in Mr. Johnson's apartment and the library, iron rosettes, and shutter hinges and holders. Other decorative metalwork was done by Julius Dietzmann's Ironcraft Works of Los Angeles, including the wrought-iron screens for the organ console, the spiral stair railing in the music room tower, ceiling fixtures in the living room, and the light fixture in the annex garage.3 This firm probably did most of the other lighting fixtures as well. Artistic Iron Works made the iron bed lamps for Mr. Johnson's bedroom and the hinges and hardware for the patio gates. 5 Rubens Caroselli Company of Pasadena made the metal portions of the sundial and the grills for the music room.6

Much of the extensive woodwork in the Main House and Annex was prepared especially for the Death Valley project; some was hand-carved while other was millwork, which had custom finishes added at the ranch to make it appear older and more "Spanish." The primary supplier of woodwork was W. H. Sheidenberger and Sons of Los Angeles. This firm provided the patio gates, posts, and side panels; gun cases and gun rack, music room doors, balusters, spindle doors, some of the furniture (including the oak wardrobe in Scotty's Room and the bookcases in Mr. Johnson's bedroom), and some of the shutters. Pacific Door and Sash Company of Los Angeles supplied the redwood screen doors, some of the window frames, and parts of staircases.

Original plans and construction: Plans for construction at Death Valley probably began as early as 1921. All the original design work for the Main House was probably executed by Johnson, although he might have relied to a large extent on the advice of F. W. Kropf, his first construction superintendent.

An early framing plan entitled "Ranch House for A. M. Johnson" has unfortunately lost the corner with its date, but is extremely similar in style to the framing plans for other early structures (i.e. Garage) that are dated November, 1922. The foundation plan for the "Ranch House of A. M. Johnson" is also dated November 1922. It Although none of the above are signed, they were all probably prepared by Albert Johnson.

A subsidiary structure to the north and behind the Main House was originally called "Cellar in the Bank." Even before it was built, the name for it changed to "Commissary" or "Gommissary Building." By the end of 1926 the one-story reinforced concrete building was completed and soon thereafter served as a storehouse for food and supplies and as workspace for construction. It also eventually housed the first electrical-generating "Power Room" at the Ranch.

In June 1926 a professional designer, Charles Alexander MacNeilledge, was contracted to extensively redesign the Main House. The "Spanish Mediterranean" theme for the design was agreed upon and the Main House was thoroughly remodeled.

By the end of 1926 the Main House and Commissary were joined by round-arched gates to the east and west and the middle third of the Main Building was completely torn down and reexcavated.

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A second story was then added to the Commissary, in two separate phases. The "Guest House" was built first over the west end and then the "Music Room" was built over the east end. A foot bridge was erected to join the second level of the Commissary with that of the Main House. Once all these second-story additions were completed the entirety was then primarily referred to as the "Annex."

A relatively light composition roof was originally planned for the Main House. This was changed to clay tile. The tile, cement, and additional framing added approximately 60,000 pounds of weight to the four roof trusses, which were not sufficiently buttressed to support it.

6. Alterations and additions:

Sometime after 1949 but during the residency of the Gospel Foundation, the eucalyptus logs over the patio were removed. The NPS intends to erect them again, pending stabilization of the stucco of the exterior walls.

The basement furnace in the Main House, which originally ran on diesel or "stove oil," was switched to function on propane gas by the Gospel Foundation. The National Park Service changed it back to oil ca. 1977.

In 1977, Solar-X brand window protection film was installed to keep light from damaging the interior. In 1987, 3-M "Scotchtint" sun control film replaced the Solar-X.

Original screen doors were removed by the National Park Service at an unknown date. The NPS intends to install them again at a later date.

The trusses in the Great Hall were repaired and stabilized between July 1980 and May 1981. The trusses had been splitting and separating due to the weight of the roof, earthquake damage, and underground nuclear testing at the Nevada Test Site. The repairs consisted of installing 48 1-1/2"-wide bolts, 48" long, on the end trusses to prevent further splitting and 1-1/4" tension bars to the center of the trusses to prevent further separation of the center splice. The repairs were undertaken by Castle maintenance crew which was supervises by Maury Paul, a structural engineer from the NPS Denver Service Center, and Robert Cox, regional historical architect.

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The exterior courtyard stairway on the north side of the Main House was modified for use as a motorized wheelchair ramp in 1981. That same year, the entire Castle was rewired. In April 1982 a new security system was installed at the Castle. Rubber stair treads were installed on the staircase in the Great Hall in 1984.

Portions of the basement below the Main House have been partitioned with plywood walls to accommodate the storage of some of the more valuable furnishings, particularly rugs.

Mrs. Johnson's apartment, on the first floor of the west end of the Annex, has been modified for use as employee housing.

The rooms in the basement below the Solarium have been modified for use as a photographic darkroom and as the "Preservation Office" for the National Park Service. This office serves the administrative needs of the preservation maintenance staff.

Part II. Architectural Information

A. General Statement:

1. Architectural Character:

The Main House/Annex is actually two separate parallel structures connected at the center by a second-story footbridge. An open courtyard with randomly laid tile, defined by round-arched gates to the east and west, runs between the two structures, and establishes the main axis for this and for much of the complex. The Main House accommodated most of the Johnsons' private domestic functions. The Annex contained guest bedrooms and music room with a large organ on the second floor, and some storerooms, a laundry room, a walk-in refrigerator, a garage, an office for Mr. Johnson and a sitting room and kitchen for Mrs. Johnson on the first.

2. Condition of Fabric: Good except for the exterior stuccoing, which is separating from the walls in several isolated locations and is in need of repair.

B. Description of Exterior:

Over-all dimensions:

Main House: 97' x 33'. Annex: 112' x 26'.

- 2. Foundations: A small portion of the foundation is made of brick. This part probably survived from the original structure. The remainder is reinforced concrete.
- Wall construction, finish, color: 3.

Main House: Wood-frame construction with a brown and beige stucco exterior finish. The ends of beams pierce the stucco.

Annex: The first floor is reinforced concrete and the second floor is wood-frame construction. Both floors have a brown and beige stucco exterior finish.

Structural system, framing:

Main House: Wood-frame construction.

Annex: First story is reinforced concrete. Second story is

wood-frame construction.

5. Porches:

Main House: A large entry portico, with three round arches, contains a spacious landing in front of the main entrance to the south. The landing's concrete railings are formed in a "weave-like" pattern, unique to the Ranch.

A shed-roofed lanai is supported just above. The wooden roof is supported by "s" shaped metal brackets to the south and by wooden pilasters with fluting where the roof meets the house to the north. Both the lanai and the landing have floors of red tile.

The Annex features a second lanai on its south side. Instead of projecting from the main mass, like the other, it is set back with it, and enclosed within a wood framework and mesh screening. The floor and walls are decorated with colored tiles and a fountain with ceramic frogs at the four cardinal points occupies the center of the room.

6. Chimneys: The Main House has three chimneys and the Annex has two. Each is individually designed and distinct from the other. The two easternmost chimneys of the Main House have a plain gray stucco finish, scored to simulate ashlar masonry, and are inset with lattice-like curved tile work. The chimney on the west end of the Main House has a brown and beige stucco exterior and is topped with a pointed arch outlined with red tile. The stucco is horizontally banded with a single row of red diamond-shaped tiles set within thin tile borders. Both annex chimneys have a brown and

beige stucco exterior. The easternmost chimney is capped by two intersecting tiled, pointed arches, and has kite-shaped tiles bordering the top. The one on the west has a threelevel cap, with each level successively smaller and outlined with thin bandings of tile.

7. Openings:

- a. Doorways and doors: The doorways are squared off, with the doors set flush with the wall. Most of the doors are made of redwood slabs joined by tongue and groove construction and decorative hand-forged metal strap hinges. The hinges have various designs reminiscent of the desert (i.e. grapevines, cacti). The wood has been seared with a blow-torch in order to darken the wood and accentuate its grain [see section on Wood in HABS No. CA-2257]. Several doors have large redwood lintels. The main entries (north and south) to the Main House have "DEATH VALLEY RANCH" engraved in the lintels, sidelights with carved spindles and decorative metal bosses.
- b. Windows: The casement windows are recessed into flared openings. Most of them are operable and have multiple or single lights in metal sashes. Almost all have large redwood lintels and rough-hewn redwood shutters. The shutters are formed of three vertical panels bound at the top and bottom with horizontal redwood panels. Some fold out into two panels to cover wider windows. Some have protective metal grilles on the outside of the structure.

8. Roof:

- a. Shape, covering: Red-tiled gable roofs. The Main House has three different sections, each roofed at a different height. The Annex also has a variety of roof levels.
- b. Cornice, eaves: Most of the roof rafters are exposed and have been darkened and decoratively carved. The gables of the Annex have been trimmed with two offset rows of wood scalloping.

The Annex has a double row of wooden scalloping that circles around almost the entire structure. This particular feature is absent from the Main House.

c. Towers:

The Main House/Annex has four separate towers, three of which are in the Annex. The largest tower, located at the northeast corner of the Annex, houses a large circular stairway that leads first to the Music Room and is generally referred to as the Music Room Tower for that reason. An arched doorway outlined in concrete blocks scored to look like stone is the entrance from the lower level. Deeply recessed arched windows, shutterd on the interior, light the staircase. The curved portion of the staircase is made of concrete, and has an iron railing with brass detailing. A straight run of stairs leading to the third-floor observation platform and balcony is made of iron and has a railing similar to that of the circular stairs below. The platform is surrounded by large round-arched openings infilled with concrete grillework. One of these openings is actually a door which provides access to the balcony. Supported by arched corbeling, the balcony features a solid concrete railing pierced with quatrefoil cutouts. flat roof of this tower is concealed behind a crenelated parapet wall with exaggerated battlements. A flag flies from a pole mounted at its center.

The Annex has a second smaller tower at the point where it meets with the footbridge and basically serves as an open-air foyer. The flattened conical roof is covered with red tiles and has a custom-designed weather vane, representing a desert prospector cooking his meal over an open fire, mounted at its center.

The smallest tower on the annex is also tile-roofed. It holds a bell, which is now rung to announce the start of NPS tours.

A fourth tower, known as the Observation Tower, is situated within the Main House just east of the Living Hall. This tower features an observation area, from which it derives its name, and a pigeon loft trimmed with decorative tile. The observation area is enclosed with a decorative iron railing. The flattened octagonal roof is covered with red tiles and surmounted by a copper-roofed electric light, purportedly designed to serve as a beacon for anyone lost in the desert. The light cupola has a custom-designed weather vane, representing the prospector leading his burro across the desert, mounted at its center.

9. Decorative Features:

The gates have carved wooden figures, such as a ram and predatory birds, at the top of each of the four posts. In the center of each of the four main gates to the courtyard is a wrought-iron heraldic shield with a "J" and an "S" in the center.

The south side of the Annex has a sun dial made of tile. The profile of the god Janus is featured.

The east gate has one concrete medallion affixed to each of the flanking patio walls. Martin Dubovay, a draftsman working for MacNeilledge, claims he designed these to represent the ancient animals of the region.

The east side of the Music Room has two large wooden shutters. Each leaf features a decorative cut-out representation of a potted pomegranate.

C. Description of Interior:

1. Floor plans: See measured drawings.

2. Stairways:

Living Hall: Both the first flight of stairs, leading to the encircling Callery, and the second flight of stairs, leading to the Observation Tower, have straight runs alongside the hall's east wall. The first flight from the living hall has wooden treads with carved edges and square-tiled risers decoratd witha glazed pattern. The treads are wider than the risers are high, purportedly a preference expressed by Mr. Johnson. The stairway has a metal handrailing. A tile border composed of red equilateral triangles with alternating points up and down proceeds up the wall by the stairs. Those with their points up are decorated with a glazed blue fleur-de-lis type design. The second flight is plainer and much narrower and has a metal stairway and handrail.

The exterior stairway, north of the Main House, has a tiled stairway and a concrete handrail capped with red tile.

The circular stairway within the Music Room Tower has concrete steps that cantilever from the inside wall of the tower and features a metal hand railing. The last twelve steps to the observation platform are completely metal and in a straight run.

3. Flooring:

Almost all floors are laid with tile. The Gallery surrounding the second story of the Living Hall has hexagonally-shaped tile, some of which have colored heraldic imprints and colored borders. Most of the rooms have custom designed Majorcan rugs as a covering.

4. Wall and Ceiling Finish:

Two different stucco finish textures were devised by the architect, MacNeilledge, that he termed Mexican and Latin. Both are basically beige in color and have a coarse-finished texture, varying only slightly in their degree of roughness and color.

The ceilings of most of the rooms are slightly tented. Some, like the Living Hall, the Music Room, the Solarium and the main Guest Room, have open ceilings that reveal the decoratively carved wood beams and trusses. Most follow a similar rusticated style. The Music Room, however, has a strong ecclesiatical flavor and includes acoustic paneling between the ornately carved beams. Representations of the Desert Holly and the Pomegranate, the national flower of Spain, have been carved into the cross-beams of the octagonally-shaped Solarium.

Most of the other rooms are simply sheathed in wood and not as intricately detailed. Two rooms, the Lower Music Room and the Dining Room, have Spanish inscriptions carved along the base of the ceiling.

Almost all of the remainder, particularly those of the first floor of the Annex, are plastered and finished in the same style as the walls. The kitchen of the Main House has a series of plastered barrel arches trimmed by wood strips.

5. Windows and trim:

The Gallery, Lower Music Room and Scotty's Room have interior shutters that are decoratively pierced. Those in Scotty's Room have cutouts in the shapes of moutain lions, mountain goats and horses.

Almost all the windows in the Main House and second floor of the Annex have decorative hand-forged curtain rods. The floor-length windows of the Solarium have colored tile surrounds. The west side of the Music Room has a round colored glass window. The other windows and French doors of the Music Room have a plaster surround that simulates stippled ashlar youssoirs.

6. Lighting fixtures: Lighting is provided by chandeliers, plainer ceiling lamps, bracket lamps, and lamps set flush with walls. The Living Hall has a large chandelier. Scotty's room has lizard-shaped wall fixtures. The Main Kitchen and Music Room have snake-shaped wall fixtures. The Music Room also has four triple-tiered chandeliers.

7. Decorative Features:

The Living Hall has a "Jaspar-rock" fountain with a tiled pool at its base. No longer functioning, the water was meant to slowly trickle down slowly from above. The water vapors it created cooled the room and the sound had a soothing effect. The fountain is framed by two rows of square red tiles decorated with a white, blue, yellow, and green floral pattern surrounded by interlocking blue circles. The edge of the pool is wide enough to sit on, and is covered with red tiles. The square red tiles rising from the floor to the edge have blue, cream, dark green, white, and mustard bird and plant designs glazed onto them.

Directly across from the fountain is a large fireplace, plastered to simulate ashlar masonry, and bordered at floor level with one row of projecting clear-glazed square red tiles. The firebox features dragon-shaped andirons. The chimney rises from the firebox in a parabolic curve, and is pierced with three hot-air exhaust holes at the base of the curve.

The Solarium has a smaller but similar fountain, that also no longer functions. This fountain is made exclusively of tile that displays an underwater marine scene.

The Lower Music Room has a rounded fireplace in the northwest corner. It is surrounded with colored tile and has glass photographs of Albert and Scotty imbedded in the mantel. They are illuminated from behind with an electric light.

The Dining Room has a full wall of hand-carved built-in shelves. They presently exhibit the Italian dinnerware, purchased by MacNeilledge especially for the Johnsons during his trip to Europe in 1929.

The Main Kitchen has a tiled built-in sink and counter. The metal cabinet drawers below the sink have cut-out shapes representing the prospector and the burro crossing the desert. The axe, shovel, canteen and the initials J and S are also represented. To the south of the sink in the corner is a false water well, that in reality conceals a garbage can. The refrigerator is concealed within an elaborate wood framework and a gas stove is contained with a large simulated hearth covered with tile.

The base of the Music Room ceiling has a series of 48 medieval shields set with a wood framework. The radiators in the Music Room are concealed by ceramic grilles. All the other radiators in the house are concealed by metal grillework.

D. Site:

1. General setting and orientation: The Main House and Annex face south with the main axis oriented east to west. The monumental and unfinished swimming pool is directly in front. The Annex is built into a steep bluff of solid rock. A large concrete retaining wall separates the bluff from the Annex and creates a small open space, meant to serve as a coal and service yard.

A large open space to the west between the Main House and the Power House was the site of the unfinished West Patio. Only some excavation and foundation work actually was executed.

The large Entrance Court to the east was once planted in palm trees. Plans were made, but never achieved, to terrace the area and put in a watercourse. The concrete substructure of the wishing well was built. It was tiled in the 1950s, while the Gospel Foundation administered the Ranch.

PART IV. PROJECT INFORMATION

The Scotty's Castle Recording Project at Death Valley National Monument, California, was undertaken during the summers 1987-89 by the Historic American Buildings Survey (HABS) division of the National Park Service, and cosponsored by the Western Regional Office of the National Park Service. Principals involved were Robert J. Kapsch, Chief of HABS/HAER; Kenneth L. Anderson, AIA, Chief of HABS and project leader in 1987 and 1988; and Paul D. Dolinsky, Principal Architect of HABS and project leader in 1989.

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The recording teams were supervised in the field by Marlys B. Thurber in 1987, John White in 1988, and Joseph D. Balachowski in 1989. The written documentation was prepared by Richard A. Bernstein of Cornell University in 1987. The report on the Main House was further researched and edited by Holly K. Chamberlain in 1988.

PART IV. SOURCES OF INFORMATION

The repository of nearly all of the sources of information is the Reference Library and Preservation Office, Scotty's Castle, Death Valley National Monument, California. Individual references take the form of endnotes, as follows:

- 1. Manuscript 15, box 3, folder 3; Manuscript 15, box 2, folder 2; Manuscript 15, box 1, folder 1.
- 2. Manuscript 15, box 2, folder 2.
- 3. Manuscript 15, box 1, folder 3.
- 4. Letter from Charles Alexander MacNeilledge to Albert M. Johnson dated October 31, 1928. Manuscript 5, box 2.
- 5. Manuscript 15, box 1, folder 1.
- 6. Manuscript 15, box 3, folder 2.
- 7. Manuscript 15, box 3, folder 2; Manuscript 5, box 21, folder 26; Manuscript 7, box 21, folder 1.
- 8. Manuscript 15, box 3, folder 2.
- 9. Drawing 41028c, 49/88.
- 10. Drawing 41028c, 46/88.
- 11. Drawing 41028c, 49/88.

ADDENDUM TO:
DEATH VALLEY RANCH, MAIN HOUSE
(Scotty's Castle)
Death Valley National Park
Death Valley vicinity
Inyo County
California

HABS No. CA-2257-A *CAL*,14-DVNM,1-A-

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PHOTOGRAPHS

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